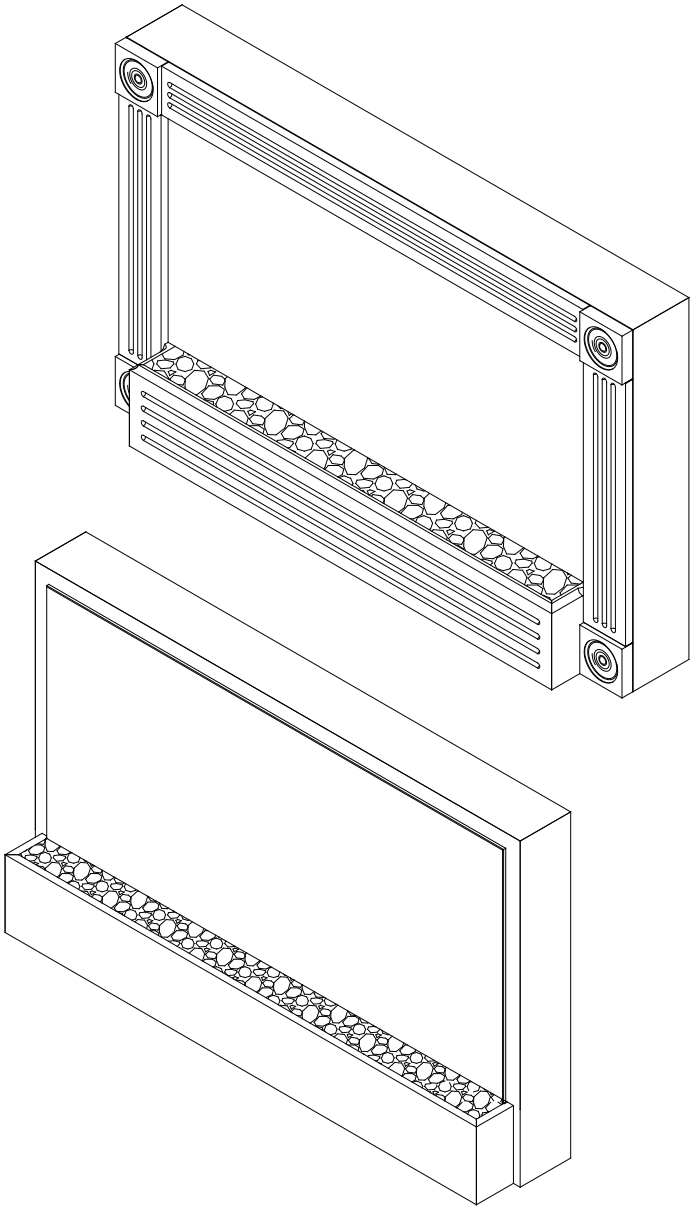
Dimplex®

Better solutions through innovation



Service Manual

Model
TFA36E
CFA36BS

UL Part Number
6905580100
6909590100

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this fireplace. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

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REV	PCN	DATE
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In keeping with our policy of continuous product development, we reserve the right to make changes without notice.
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Always use a qualified technician or service agency to repair this fireplace.

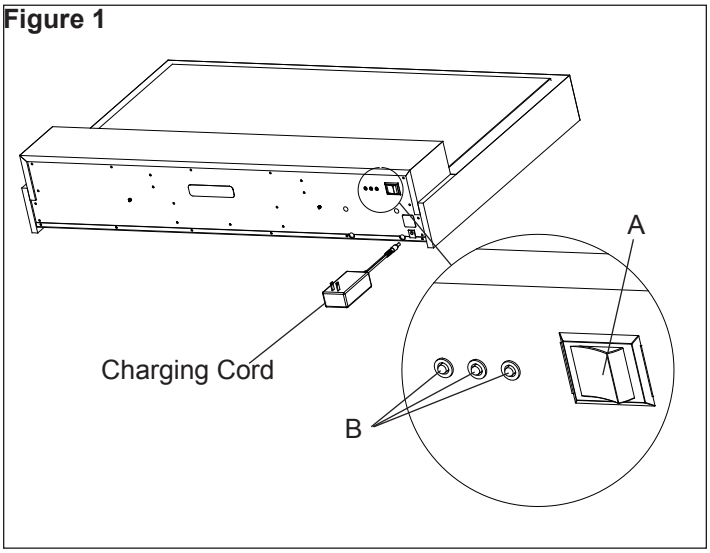
! **NOTE:** Procedures and techniques that are considered important enough to emphasize.

⚠ **CAUTION:** Procedures and techniques which, if not carefully followed, will result in damage to the equipment.

⚠ **WARNING:** Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

OPERATION

Figure 1



This electric fireplace is operated by a momentary switch located on the bottom of the fireplace, under the right hand corner (Figure 1-A).

Press the momentary switch to toggle the fireplace's flame effect on or off.

The battery charge LEDs (Figure 1-B) will indicate the charge level of the battery. The LEDs read green, yellow and red from right to left. Once the red battery charge LED is lit, the electric fireplace should be plugged in to recharge. The fireplace can operate while charging.

! NOTE: The fireplace will shut off automatically if it is unplugged during operation. The momentary On/Off Switch will need to be activated to turn the fireplace on again.

MAINTENANCE

⚠ WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

! NOTE: Even if the fireplace is not used regularly, the battery should be fully recharged at minimum every three (3) months to prolong battery life.

Partially Reflective Glass Cleaning

The partially reflective glass is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the partially reflective glass may collect dust particles; these can be removed by dusting lightly with a clean dry cloth.

To remove fingerprints or other marks, the partially reflective glass can be cleaned with a damp cloth. The partially reflective glass should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners.

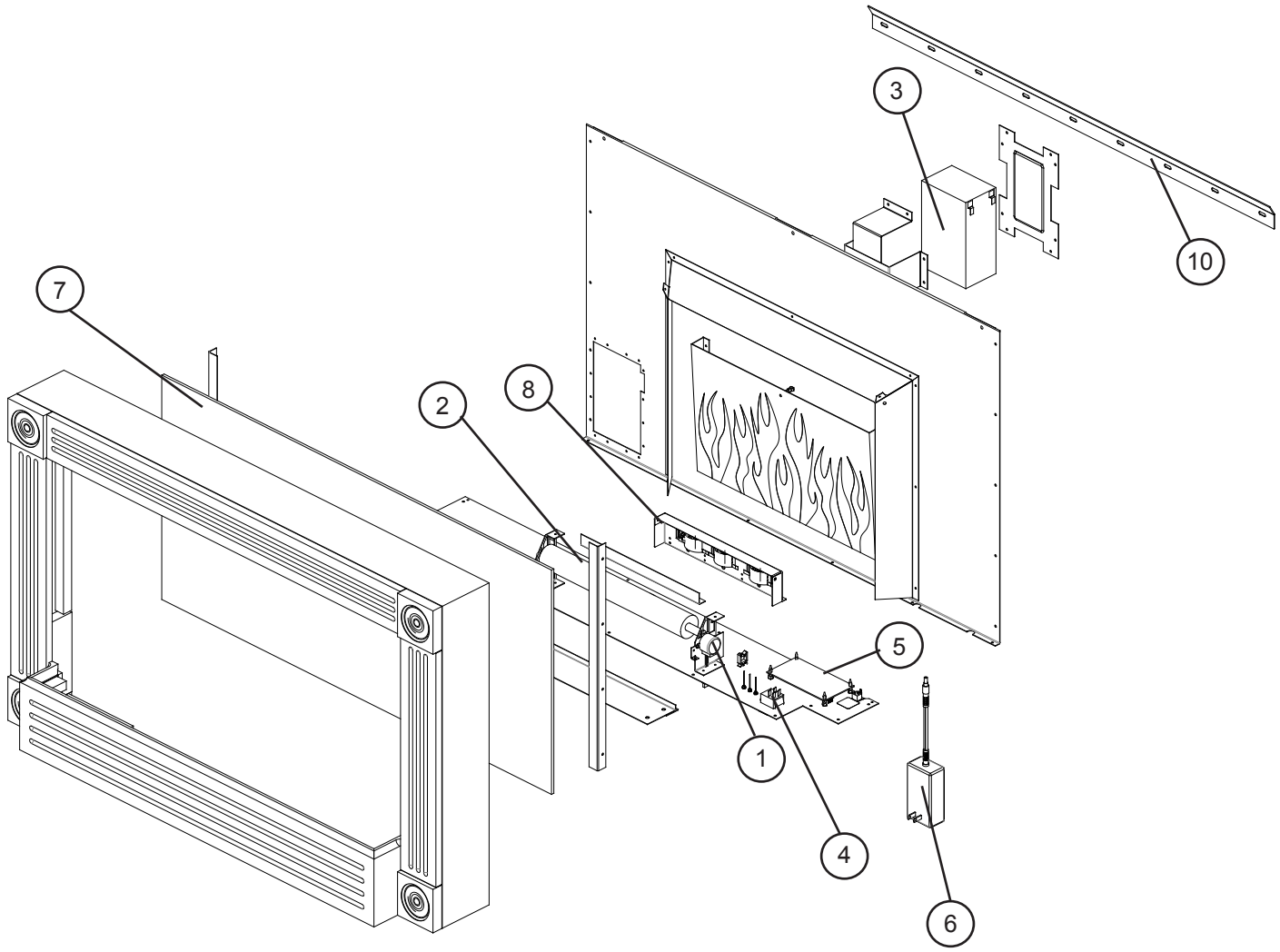
Fireplace Surface Cleaning

Use only a damp cloth to clean painted surfaces of the fireplace. Do not use abrasive cleaners.

Servicing

Except for battery replacement and cleaning described above, an authorized service representative should perform any other servicing.

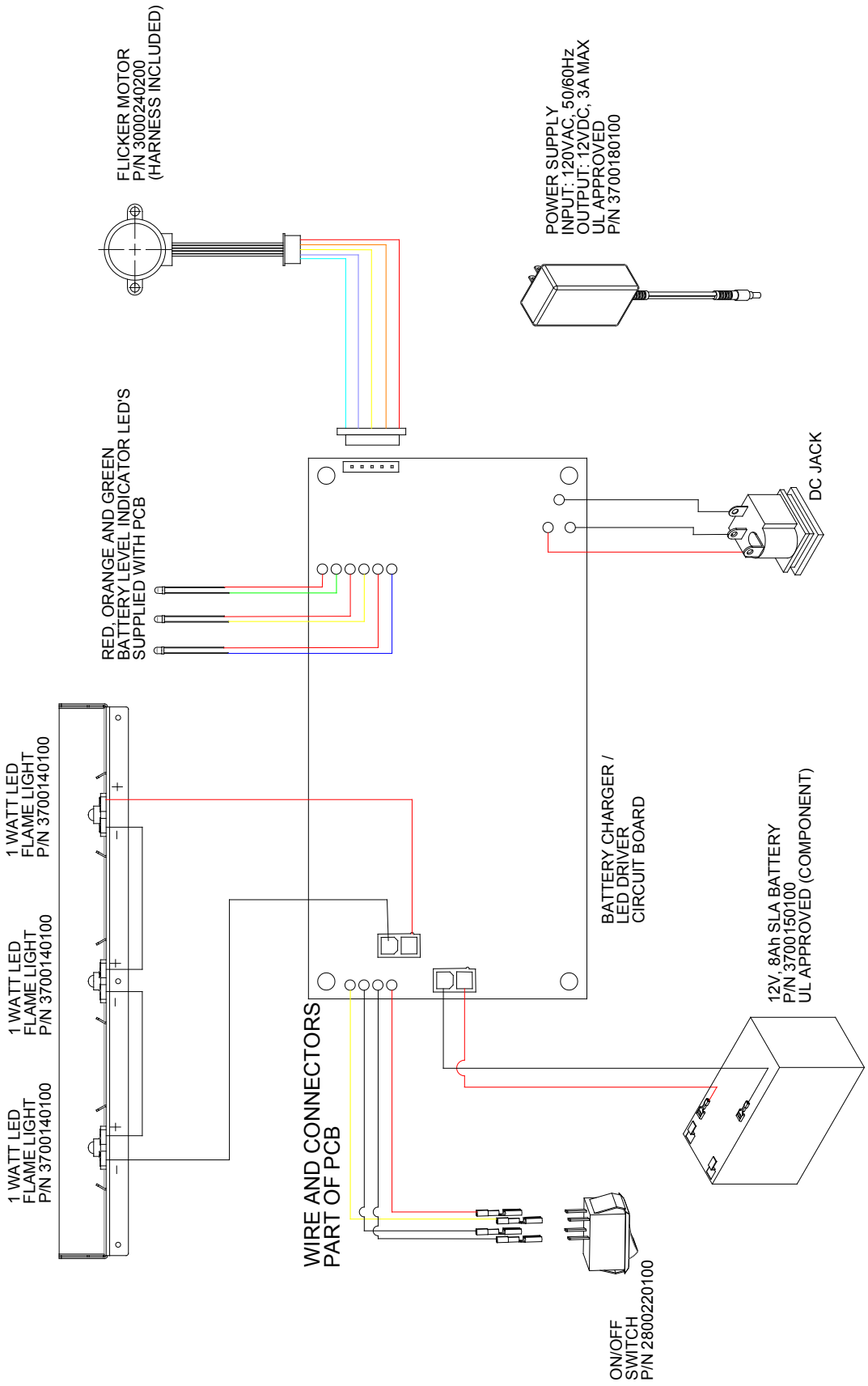
EXPLODED PARTS DIAGRAM



Replacement Parts List

1. Flicker Motor 3000240200KIT
2. Flicker Rod 5901590100RP
3. Battery, 12V, 8Ah, .25” terminals. 3700150100RP
4. Switch, ON/OFF Momentary SPDT . . . 2800220100RP
5. PCB; Driver Board; Charger; DC Jack . 3000750100RP
6. AC/DC Power Supply with cord 3700180100RP
7. Partially Reflective Glass Assembly . . . 5901550100RP
8. LED Light Assembly 6908300100RP
9. Battery Wire Harness 2500560100RP
10. Wall Mounting Bracket 1021650100RP
11. River Rocks, Large 1400060100RP

WIRING DIAGRAM



BATTERY REPLACEMENT

Tools Required: Phillips Screw Driver;
Flat Head Screw Driver
Needle Nosed Pliers

WARNING: Unplug or disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

WARNING: To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex replacement rechargeable batteries.

WARNING: Improper handling of battery may result in possible explosion hazard, electric shock and severe bodily injury.

- Do not dispose of battery in a fire, the battery may explode
- Do not open or mutilate battery. The battery contains chemicals that are toxic to the eyes and skin
- To decrease risk of electric shock, remove wrist watches and jewelry such as rings and bracelets when replacing battery.
- To decrease risk of electric shock, only use tools with insulated handles.
- To prevent damage to the electric fireplace and to prevent bodily harm, only replace battery with Dimplex replacement rechargeable batteries.
- To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex approved DC power supply to power and recharge battery.
- To dispose of spent battery, return it to place of fireplace purchase, deliver it to a local recycling facility or ship it to Dimplex North America Limited in the replacement battery packaging material.

1. Ensure the fireplace is turned OFF.
2. Unplug the Power Supply cord from the unit (if attached).
3. Carefully remove the River Rocks (media) from the Media Tray on the front of the fireplace
4. Lift and remove the electric fireplace from the wall-mounting bracket (Figure 2) and carefully place it upright on a flat surface.

Figure 2

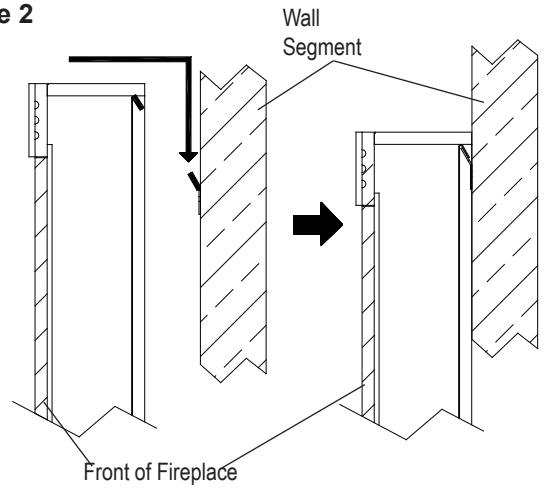
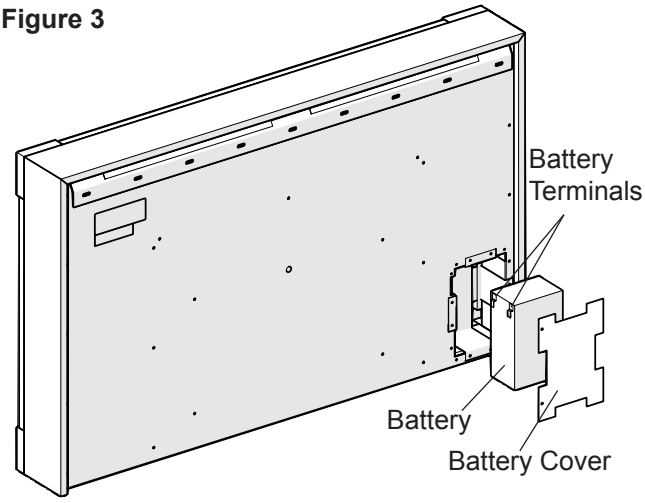


Figure 3



CAUTION: A protective barrier (i.e. blanket) between the fireplace and work surface will help prevent scratches on the work surface or the fireplace.

5. On the back of the fireplace, remove the eight (8) screws securing the battery cover to the unit, located in the bottom, right corner of the back panel (Figure 3).
6. Lift and remove the battery access cover.
7. Tilt the unit backwards, to allow the battery to slide out of the opening.

NOTE: The battery is heavy so ensure that it will slide out onto the flat surface.

CAUTION: Take care not to damage the 2 wire connections on the left side of the battery. (Figure 3)

8. Once battery is out of the opening, remove the two (2) wire lead connectors from the battery terminals taking note of their original configuration.

NOTE: These wire connectors can be carefully removed one at a time by using needle nosed pliers.

9. Reconnect the wire leads with black leading to black and red leading to red to ensure correct polarity and that they are not pinched when replacing the access cover.
10. Insert the replacement battery into the opening, carefully orienting the wire leads so that they are not pinched.
11. Replace the access cover and screws.

Battery must be recycled or disposed of properly. Check with your Local Authority or Retailer for recycling advice in your area.

FLICKER MOTOR REPLACEMENT

Tools Required: Phillips Screw Driver;
Flat Head Screw Driver
Needle Nosed Pliers

WARNING: Unplug or disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

WARNING: To prevent damage to the electric fireplace

and to prevent bodily harm, only use Dimplex replacement rechargeable batteries.

⚠ **WARNING:** Improper handling of battery may result in possible explosion hazard, electric shock and severe bodily injury.

- Do not dispose of battery in a fire, the battery may explode
- Do not open or mutilate battery. The battery contains chemicals that are toxic to the eyes and skin
- To decrease risk of electric shock, remove wrist watches and jewelry such as rings and bracelets when replacing battery.
- To decrease risk of electric shock, only use tools with insulated handles.
- To prevent damage to the electric fireplace and to prevent bodily harm, only replace battery with Dimplex replacement rechargeable batteries.
- To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex approved DC power supply to power and recharge battery.
- To dispose of spent battery, return it to place of fireplace purchase, deliver it to a local recycling facility or ship it to Dimplex North America Limited in the replacement battery packaging material.

1. Ensure the fireplace is turned OFF.
2. Unplug the Power Supply cord from the unit (if attached).
3. Carefully remove the River Rocks (media) from the Media Tray on the front of the fireplace
4. Lift and remove the electric fireplace from the wall-mounting bracket (Figure 2) and carefully place it upright on a flat surface.

⚠ **CAUTION:** A protective barrier (i.e. blanket) between the fireplace and work surface will help prevent scratches on the work surface or the fireplace.

5. On the back of the fireplace, remove the eight (8) screws securing the battery cover to the unit, located in the bottom, right corner of the back panel (Figure 3).
6. Lift and remove the battery access cover.
7. Tilt the unit backwards, to allow the battery to slide out of the opening.

! **NOTE:** The battery is heavy so ensure that it will slide out onto the flat surface.

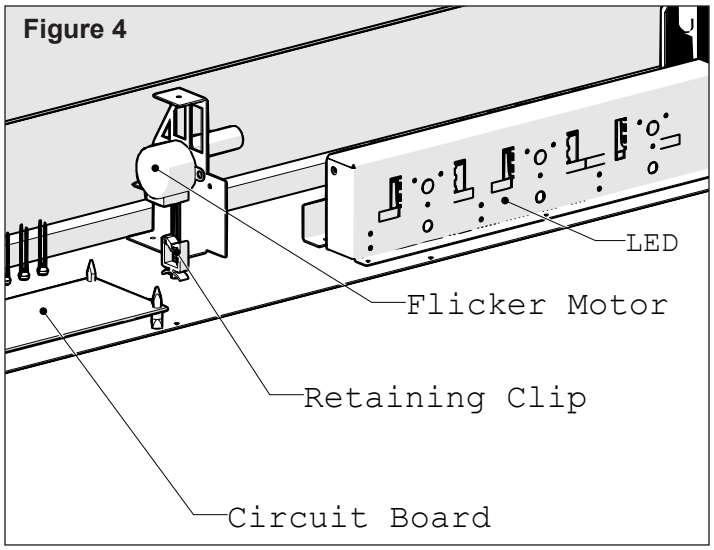
⚠ **CAUTION:** Take care not to damage the 2 wire connections on the left side of the battery. (Figure 3)

8. Once battery is out of the opening, remove the two (2) wire lead connectors from the battery terminals taking note of their original configuration.

! **NOTE:** These wire connectors can be carefully removed one at a time by using needle nosed pliers.

9. Set the Battery aside.
10. Remove the remainder of the 17 screws which secure the back panel on to the fireplace. 3 along the top; 3 along the right (battery side); 5 along the left (switch side); and 6 on the bottom lip of the back panel.

Figure 4



11. Lift the back panel off the unit, exposing the internal components and set it aside.
12. Looking at the unit from behind, locate the flicker motor on the left beside the circuit board. (Figure 4) Unplug the motor wire connector from the circuit board and unhook the wires from the retaining clip(s) on the bottom panel.
13. Remove the flicker motor mounting bracket, by removing the 2 screws that attach to the bottom panel.
14. Grasp the flicker motor with the mounting bracket and flicker rod still attached. Slide the flicker rod out of the flicker assembly mounting bracket located on the opposite end.
15. Separate the flicker motor and flicker rod, by holding the motor in one hand, grasping the rubber flicker connector and rod with the other hand, then twisting and pulling them apart. Set the flicker rod with the rubber connector aside.
16. Remove the 2 screws which secure the flicker motor to the motor mounting bracket.
17. Replace with the new flicker motor onto the mounting bracket and secure the motor to the bracket using the original 2 screws.
18. Push the flicker rod with rubber connector onto the motor shaft and slide it back into the 2nd flicker assembly mounting bracket.

! **NOTE:** Ensure that the rod has not been bent. If it has it may cause noises and limited flame effect during usuage.

19. Secure the mounting bracket to the bottom panel of the fireplace with the original 2 screws.
20. Re-assemble the remainder of the unit in reverse order.

! **NOTE:** Before placing the battery back into the opening, reconnect the wires in their original position with black leading to black and red leading to red to ensure correct polarity and that they are not pinched when replacing the access cover.

LIGHT HARNESS REPLACEMENT

Tools Required: Phillips Screw Driver;
Flat Head Screw Driver
Needle Nosed Pliers

WARNING: Unplug or disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

WARNING: To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex replacement rechargeable batteries.

WARNING: Improper handling of battery may result in possible explosion hazard, electric shock and severe bodily injury.

- Do not dispose of battery in a fire, the battery may explode
- Do not open or mutilate battery. The battery contains chemicals that are toxic to the eyes and skin
- To decrease risk of electric shock, remove wrist watches and jewelry such as rings and bracelets when replacing battery.
- To decrease risk of electric shock, only use tools with insulated handles.
- To prevent damage to the electric fireplace and to prevent bodily harm, only replace battery with Dimplex replacement rechargeable batteries.
- To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex approved DC power supply to power and recharge battery.
- To dispose of spent battery, return it to place of fireplace purchase, deliver it to a local recycling facility or ship it to Dimplex North America Limited in the replacement battery packaging material.

1. Ensure the fireplace is turned OFF.
2. Unplug the Power Supply cord from the unit (if attached).
3. Carefully remove the River Rocks (media) from the Media Tray on the front of the fireplace
4. Lift and remove the electric fireplace from the wall-mounting bracket (Figure 2) and carefully place it upright on a flat surface.

CAUTION: A protective barrier (i.e. blanket) between the fireplace and work surface will help prevent scratches on the work surface or the fireplace.

5. On the back of the fireplace, remove the eight (8) screws securing the battery cover to the unit, located in the bottom, right corner of the back panel (Figure 3).
6. Lift and remove the battery access cover.
7. Tilt the unit backwards, to allow the battery to slide out of the opening.

NOTE: The battery is heavy so ensure that it will slide out onto the flat surface.

CAUTION: Take care not to damage the 2 wire connections on the left side of the battery. (Figure 3)

8. Once battery is out of the opening, remove the two (2) wire lead connectors from the battery terminals taking note of their original configuration.

NOTE: These wire connectors can be carefully removed one at a time by using needle nosed pliers.

9. Set the Battery aside.
10. Remove the remainder of the 17 screws which secure the back panel on to the fireplace. 3 along the top; 3 along the right (battery side); 5 along the left (switch side); and 6 on the bottom lip of the back panel.
11. Lift the back panel off the unit, exposing the internal components and set it aside.
12. Looking at the unit from behind, locate the light harness plug on the main circuit board and unplug it from the circuit board. (Figure 4)
13. Release the wires leads from the retaining clips and wire ties, which secure them to the bottom panel of the fireplace.

NOTE: Be sure to cut the wire ties which secure the light harness and the battery wire harness to the light housing panel taking care not to damage the wires.

14. Remove the 3 screws holding the light housing to the bottom panel of the fireplace.
15. Remove the light harness assembly, and replace with the new assembly.
16. Secure the new light housing panel to the bottom panel with the original screws.
17. Secure the wires to the retaining clips and plug the light harness connector to the circuit board.
18. Re-assemble the remainder of the fireplace in reverse order.

NOTE: Before placing the battery back in the housing/brackets, ensure that the battery wire leads are re-connected in their original position with black leading to black and red leading to red to ensure correct polarity and that they are not pinched when replacing the access cover.

ON/OFF MOMENTARY SWITCH REPLACEMENT

Tools Required: Phillips Screw Driver;
Flat Head Screw Driver
Needle Nosed Pliers

WARNING: Unplug or disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

WARNING: To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex replacement rechargeable batteries.

WARNING: Improper handling of battery may result in possible explosion hazard, electric shock and severe bodily injury.

- Do not dispose of battery in a fire, the battery may explode
- Do not open or mutilate battery. The battery contains chemicals that are toxic to the eyes and skin

- To decrease risk of electric shock, remove wrist watches and jewelry such as rings and bracelets when replacing battery.
- To decrease risk of electric shock, only use tools with insulated handles.
- To prevent damage to the electric fireplace and to prevent bodily harm, only replace battery with Dimplex replacement rechargeable batteries.
- To prevent damage to the electric fireplace and to prevent bodily harm, only use Dimplex approved DC power supply to power and recharge battery.
- To dispose of spent battery, return it to place of fireplace purchase, deliver it to a local recycling facility or ship it to Dimplex North America Limited in the replacement battery packaging material.

1. Ensure the fireplace is turned OFF.
2. Unplug the Power Supply cord from the unit (if attached).
3. Carefully remove the River Rocks (media) from the Media Tray on the front of the fireplace
4. Lift and remove the electric fireplace from the wall-mounting bracket (Figure 2) and carefully place it upright on a flat surface.

⚠ **CAUTION:** A protective barrier (i.e. blanket) between the fireplace and work surface will help prevent scratches on the work surface or the fireplace.

5. On the back of the fireplace, remove the eight (8) screws securing the battery cover to the unit, located in the bottom, right corner of the back panel (Figure 3).
6. Lift and remove the battery access cover.
7. Tilt the unit backwards, to allow the battery to slide out of the opening.

! **NOTE:** The battery is heavy so ensure that it will slide out onto the flat surface.

⚠ **CAUTION:** Take care not to damage the 2 wire connections on the left side of the battery. (Figure 3)

8. Once battery is out of the opening, remove the two (2) wire lead connectors from the battery terminals taking note of their original configuration.

! **NOTE:** These wire connectors can be carefully removed one at a time by using needle nosed pliers.

9. Set the Battery aside.
10. Remove the remainder of the 17 screws which secure the back panel on to the fireplace. 3 along the top; 3 along the right (battery side); 5 along the left (switch side); and 6 on the bottom lip of the back panel.
11. Lift the back panel off the unit, exposing the internal components and set it aside.
12. Looking at the unit from behind, locate the ON/OFF switch on the left side of the bottom panel.
13. Disconnect the wire lead connectors on the switch coming from the circuit board noting the original configuration. (Figure 5).

! **NOTE:** Using a flat head screwdriver gently pry between the end of the connector and the switch to release the wires.

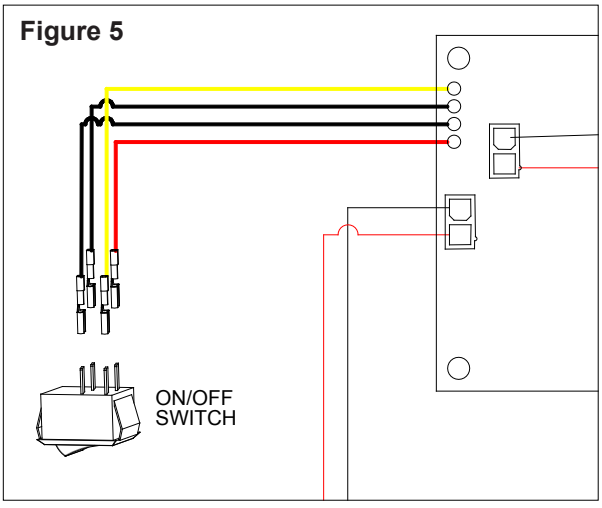
! **NOTE:** Try not to reverse the two black wires on the switch.

14. Remove the switch from the bottom panel by depressing the 4 mounting tabs and pushing the switch outward through the bottom panel of the fireplace.

! **NOTE:** Pliers or a flat head screw driver may be helpful in getting a better grasp or putting more pressure on the tabs to release them.

15. Push the new switch into place through the bottom panel according to the original position.
16. Re-connect the wire connectors from the board. (Figure 5)
17. Re-assemble the remainder of the fireplace in reverse order.
18. **!** **NOTE:** Before placing the battery back in the housing/brackets, ensure that the battery wire leads are re-connected in their original position with black leading to black and red leading to red to ensure correct polarity and that they are not pinched when replacing the access cover.

Figure 5



CIRCUIT BOARD REPLACEMENT / LED DRIVER PCB CIRCUIT BOARD

Tools Required: Phillips Screw Driver;
Flat Head Screw Driver
Needle Nosed Pliers

⚠ **WARNING:** Unplug or disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Ensure the fireplace is turned OFF.
2. Unplug the Power Supply cord from the unit (if attached).
3. Carefully remove the River Rocks (media) from the Media Tray on the front of the fireplace
4. Lift and remove the electric fireplace from the wall-

mounting bracket (Figure 2) and carefully place it on a flat surface with the partially reflective glass side down.

⚠ **CAUTION:** A protective barrier (i.e. blanket) between the fireplace and work surface will help prevent scratches on the work surface or the fireplace.

5. On the back of the fireplace, remove the eight (16) screws from the battery access cover and the battery mounting brackets located in the bottom, right corner of the back panel (Figure 3).
6. Lift and remove the battery access cover.
7. Lift and remove the battery out of the housing.

! **NOTE:** The battery is heavy so you will need to use the brackets for leverage to lift it out of the opening. A flat head screwdriver may be helpful for additional leverage behind the battery bracket when lifting the battery and brackets out of the fireplace.

⚠ **CAUTION:** Take care not to damage the 2 wire connections on the left side of the battery Figure 8).

8. Once battery is out of the opening, remove the two (2) wire lead connectors from the battery spade connectors taking note of their original configuration (Figure 4).

! **NOTE:** These wire lead connectors can be pulled off by using needle nosed pliers to carefully pull the connectors, or a flat head screw driver to pry the connectors off the spades on the battery.

9. Set the Battery aside.
10. Remove the remainder of the (17) screws which secure the back panel on to the fireplace. (3) along the top; (3) along the right (battery side); (5) along the left (switch side); and (6) on the bottom lip of the back panel.
11. Lift the back panel off the unit, exposing the internal components and set it aside.
12. Looking at the unit from behind, locate the circuit board (control panel), on the left hand side of the bottom panel.
13. Unplug the wire harness plug connectors on the circuit board (flicker motor; LED light harness, battery wire harness).
14. Guide the battery charger input jack out from the left side of the bottom panel by sliding it up towards you.
15. Disconnect the wire lead connectors coming from the circuit board to the switch noting the original configuration.

! **NOTE:** Pliers can be used for a better grip on the connector, or a flat head screw driver can be used to carefully pry up between the switch and connector if you are unable to pull it off.

! **NOTE:** Try not to reverse the two black wires on the switch. Their positioning on the circuit board to the switch is: (Figure 5)

- Red-1, Black-2 goes to the side of the switch farthest from the circuit board, Black-2 on the spade in the center of the switch and Red-1 on the spade on the right side;
- Black-3, Yellow-4 goes to the side of the switch closest to the circuit board, Black-3 on the spade in the center of the switch and Yellow-4 on the spade on the right side of the switch.

16. Carefully pull the (3) charge level indicator lights with wires out from their mounting clips near the switch noting their original order, (Green in the clip to the left closest to the switch, Yellow in the center; Red in the clip on the right).

! **NOTE:** There is rubberized glue securing these in the clip. When pulling on the indicator lights, the glue will come off with the bulb & wires.

! **NOTE:** If necessary, using pliers may allow for a better grip when pulling these bulbs out.

17. Remove the circuit board from the mounting clips located on the 4 corners of the board. Use a pair of pliers to pinch the tip of each mounting clip or cut the tabs off so the original board can be pulled off.
18. Push the remainder of the old tabs out through the bottom panel and replace with the new tabs provided with the replacement circuit board.
19. Line up the 4 corners of the replacement board to the (4) mounting tabs and carefully push the new board down onto the tabs.
20. Connect all of the wires and harnesses according to their original configuration.

! **NOTE:** Ensure that the switch wires and the battery level indicator lights are in their correct order and locations as described in step 15 and 16.

21. Re-assemble the remainder of the fireplace in reverse order.

! **NOTE:** Before placing the battery back in the housing/brackets, ensure that the battery wire leads are re-connected in their original position with black leading to black and red leading to red to ensure correct polarity and that they are not pinched when replacing the access cover.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
Appearance		
Fireplace does not turn On	Improper operation	Refer to Operation Section
	Battery not Charged	Charge Battery
	Loose wiring	Check wiring connections
	Dead Battery	Replace Battery
	Defective LED PCB	Replace LED PCB
Flame Frozen	Defective flicker motor	Replace flicker motor
	Loose wiring	Check wiring connections
Flame not bright or flame not visible	Loose wiring	Check wiring connections
	Defective light harness	Replace light harness
Flame Shudder	Defective flicker motor	Replace flicker motor